

WHAT IS CLAIMED IS:

1. A surgical method for implanting at least two spinal fusion implants into a disc space of disc material separating a first and second vertebrae, said disc space and first and second vertebrae divisible into first and second sides separated by a sagittal plane, said method comprising the steps of:
 - (a) inserting a distraction spacer into said disc space at a desired first implant location on said first side with first distraction spacer sized to urge said first and second vertebrae apart upon said insertion;
 - (b) placing a guide at said second side with said guide adapted to direct tools axially through an axis parallel to and equidistant between opposing end plates of said first and second vertebrae;
 - (c) forming a second implant bore at said desired second implant location by removing bone material from said first and second vertebrae and by removing disc material at said second implant location with said second implant bore sized to receive said second implant, said forming of said second bore utilizing at least a first boring tool guided by said guide;
 - (d) implanting said implant into said second implant bore;
 - (e) relieving said means for holding at said second side;
 - (f) removing first distraction spacer and applying said guide to said first side;
 - (g) forming a first implant bore at said desired first location by removing bone material from said first and second vertebrae and by removing disc material at said first implant location with said first bore sized to receive said first implant, said forming of said second bore utilizing at least a first boring tool guided by said guide;

(h) implanting said first implant into said first implant bore; and

(i) relieving said means for holding at said first side.

2. A method according to claim 1 wherein said step of placing a guide at said second side includes:

(a) providing a guide tube having an open first end and an open second end with attachment means on said first end for securing said first end to said first and second vertebrae;

(b) placing said first end against said first and second vertebrae with said guide tube aligned with said second implant location.

3. A method according to claim 2 wherein said step of forming said second bore includes inserting a boring tool into said guide tube with said boring tool sized to form said second implant bore and operating said boring tool to bore into and remove said bone material while guiding said boring tool with said guide tube.

4. A method wherein according to claim 1 wherein said step of applying said guide to said first side includes:

(a) providing a guide tube having an open first end and open second end with attachment means on said first end for securing said first end to said first and second vertebrae;

(b) urging said end against said first and second vertebrae with said guide tube aligned with said first implant location.

5. A method according to claim 1 wherein said step of placing said guide at said second side includes inserting a guide pin into said disc space at said second implant location with the guide pin selected to be of a size approximate to a size of said distraction space;

providing a guide tube having an open first end and an open second end with attachment means on said first

end for securing said first end to said first and second vertebrae;

urging said first end against said first and second vertebrae with said guide tube aligned with said first implant location.

6. A method according to claim 5 wherein said step of forming said second implant bore includes removing said guide pin through said guide tube and inserting a boring tool into said guide tube with said boring tool sized to form said first implant bore and operating said boring tool to bore into and remove said bone material while guiding said boring tool with said guide tube.

7. A method according to claim 5 wherein said guid pin is secured to a starting boring tool to prebore said second implant bore with said preboring tool and attached spacer inserted into said guide tube and operated to partially bore into said vertebrae to a desired prebore depth;

removing said starting boring tool and attached spacer through said guide tube and inserting a finish boring tool into said guide tube and operating said finish boring tool to finally bore into and remove said bone material while guide said second boring tool with said guide tube.

8. A method according to claim 2 wherein said implant is inserted through said guide tube.

9. A method according to claim 5 comprising providing a tube guide attached to said guide pin and passing said guide tube over said tube guide to place said tube against said vertebrae in a desired position.

10. A surgical method for implanting at least two spinal fusion implants into a disc space of disc material separating a first and second vertebrae, said disc space and first and second vertebrae divisible into first and

second sides divided by a sagittal plane; said method comprising the steps of:

(a) placing a distraction plug between said vertebrae at one of said sides to distract said vertebrae;

(b) forming a first implant receiving bore in the other of said sides while retaining said distraction plug in place, said forming including using a guide pin of a size equal to said plug to place a guide on said other of said sides to guide boring tools along an axis parallel to and equally spaced from end plates of said vertebrae.

11. A method according to claim 10 comprising inserting a first implant into said first bore and removing said distraction spacer and forming a second finished bore in said one of said sides sized to receive a second implant and placing said second implant in said second bore.

12. A method according to claim 11 wherein said bores are formed on a posterior side of said vertebrae.

13. A method according to claim 11 wherein said bores are formed on an anterior side of said vertebrae.

14. A method according to claim 11 wherein said bores are formed laparoscopically.

15. A surgical method for implanting a spinal fusion implant into a disk space of disk material separating opposing end plates of a first and a second vertebrae, said method comprising the steps of:

(a) placing a distraction plug between said vertebrae with said distraction plug urging against said end plates to distract said vertebrae;

(b) removing said distraction plug;

(c) securing a guide pin to a drill tube guide of predetermined dimensions with said guide pin sized approximate to a sizing of said distraction plug and

inserting said guide pin into a space formed by said distraction plug;

(d) placing a guide tube over said drill tube guide and securing said guide tube to said first and second vertebrae;

(e) removing said guide pin and said drill tube guide from said guide tube while retaining said guide tube secured to said first and second vertebrae;

(f) boring an implant bore between said first and second vertebrae by inserting a boring tool into said guide tube and guiding said tool with said guide tube.

16. A method according to claim 15 wherein said boring includes providing a preboring tool with said guide pin secured to said preboring tool and preboring said bore with said guide pin guiding said boring tool between said vertebrae.

17. A kit for implanting at least two spinal fusion implants into a disk space of disk material separating a first and second vertebrae, said disk space and first and second vertebrae divisible into first and second sides separated by a sagittal plane, said kit comprising:

a first distraction spacer sized to be inserted into said disk space at a desired first implant location on said first side with said first distraction spacer sized to urge said first and second vertebrae apart upon said insertion;

means for placing a guide tube at said second side with said guide tube adapted to direct tools axially through an axis parallel to and equidistant between opposing end plates of said first and second vertebrae;

means for forming a second implant bore at said desired second implant location.

18. A kit according to claim 17 wherein said guide tube includes an open first end and open second end with

means on said first end for securing said first end to said first and second vertebrae.

19. A kit according to claim 17 comprising a guide pin sized to be urged between said first and second vertebrae and equal in size to said spacer.

20. A surgical kit for implanting spinal fusion implants into a disk space of disk material separating a first and second vertebrae, said disk space and first and second vertebrae divisible into first and second sides separated by a sagittal plane, said kit comprising:

a distraction plug sized to be inserted between the vertebrae on at least one of said sides and to urge said vertebrae apart;

a guide pin sized to be received on at least one side of said vertebrae into said disk space and sized approximate to a size of said plug;

a drill tube guide attached to said guide pin on a proximal end of said drill tube guide with said drill tube guide having predetermined external dimensions;

a drill tube sized to be received upon said drill tube guide within said drill tube in close tolerance therewith and with means on a proximal end of said drill tube for fastening said drill tube to said vertebrae; and

a reamer having a proximal end with means for boring into said vertebrae and with said reamer size to be received within said drill tube.

21. A kit according to claim 20 comprising a drill tube planar having means on a proximal end thereof for rasping said vertebrae with said drill tube planar hollow and sized to be received upon said drill tube guide in close tolerance.

22. A kit according to claim 20 further comprising an implant driver having means on a distal end thereof for releasably engaging an implant and turning said implant

upon turning of said driver, said driver sized to be
slidably received within said drill tube.

23. A kit according to claim 20 comprising a first
reamer having means on a distal end thereof for boring into
said vertebrae upon turning of said reamer and further
having means on said distal end for releasably receiving
said guide pin;

 said reamer sized to be received within said drill
tube.